

ROLE OF CLUSTERS IN IMPROVING TEACHERS' CLASSROOM PRACTICES: DISTICTIONS AND CHALLENGES

Lulama Zide & Matseliso L Mokhele

ABSTRACT

This study explores the role of teacher clusters in improving classroom practices specifically focusing of distinctions and challenges. It is assumed that improving teachers' knowledge, skills and dispositions is one of the most critical steps to improving student achievement. Finding effective ways of encouraging teacher understanding and change has therefore become a priority for many governments. Hence, the need for teacher professional development models such as cluster system. As much as the literature shows how cluster systems may serve as innovative programmes that can bring quality education, they (clusters) have not been used as expected and teachers are generally not satisfied with the way they are offered to them. This paper explores the reflections of teachers on clusters as models to improving their teaching and learning. Qualitative case study design was used with a sample of six participants purposely selected. Results display that teachers express dissatisfaction with the cluster programmes due to limited time taken during their participation in clusters, and that there is lack of planning, monitoring and refreshments. The paper concludes and recommends that, transformation can only occur if the teachers' voices are heard, acknowledged and incorporated into planning and implementation of the cluster programmes.

Keywords: Teacher professional development, teacher-led professional development, effective professional development, continuing professional development.

INTRODUCTION

The development of the teaching profession concept has changed over the last decade. With student learning and achievement, being so greatly affected by the quality of teaching, effective teacher development is important for any educational system to remain competitive in a global arena and the continuity on teacher professional development has become one of the most common central concerns in educational studies over the past several decades (Bayar, 2014). Various teacher professional development programmes have been identified by scholars and within them emerges the concept of teacher-led professional development programmes. Stacy (2013) asserts that teacher empowerment can emerge within the current system through teacher-led professional development. This entails professional development led by teachers themselves in helping one other improve the quality of teaching and learning in education. Teacher-led professional development creates opportunities to enhance professional autonomy, emphasises professional judgement and provides space to validate teacher voices, all essential components of teacher empowerment (Stacy, 2013).

In her research, Dyer (2013), “discusses four critical elements that help make teacher professional learning meaningful and worthwhile: Choice: Teachers are like students because they need and appreciate choice. Choice within a given framework or focus allows teachers to determine their personal priorities; flexibility: in addition, to choose, teachers need to be allowed to make modifications to make the new learning work best in their own classrooms; incremental steps: it takes time to change a practice and to be lasting, it must become a part of the teacher’s routine. Professional learning for teachers that allows them to practice in small steps supports this idea; supportive accountability: change in teaching practice is challenging and requires support and accountability.

Stacy (2013) further asserts that teachers in a collaborative setting have opportunities to share their expertise as classroom professionals, develop common practices and assess how those practices improve student learning. Meidl and Meidl (2011) emphasise that even if teachers are mandated to implement scripted curricula, teacher-led professional development can enable curriculum adaptation or integration.

Various initiatives such as teacher clusters and many others are worldwide initiatives recognised as teacher-led professional development programmes. Teacher clusters are examples of teacher led professional development that focus on bringing together teachers from same schools and neighbouring schools for professional development. The focus of this article is to explore teachers’ experiences specifically of teacher clusters as teacher-led professional development more specifically on teacher clusters.

REVIEW OF RELATED LITERATURE

Conceptualisation of clusters

Clusters are viewed by Chikoko (2007) as grouping of schools within the same geographical location aimed at improving the quality and relevance of the education in the schools. Giordano (2008) also acknowledges school clusters as a grouping of schools in the same neighbourhood that are brought together for a common purpose. Each cluster normally consists of between five and seven schools; one school in each group is selected to serve as the cluster centre and the cluster centre is centrally and as accessible as possible to its satellite schools.

In other countries such as the United States and the United Kingdom, terminology, such as networks, partnerships and joint planning are used to refer to clusters (Mphahlele, 2012). Levine (2010) argues that, an impressive array of scholars and reformers have called for teachers to overcome their historic isolation through the development of "teacher professional community"

Why clusters?

The common purpose of clusters or teacher communities is to operate on the premise that learning is a social process and it requires people to collaborate and share information and ideas (Maphosa, Mutekwe, Machingambi, and Wadesango, 2013). This purpose is in line with the essential features of effective professional development, which include teacher involvement, collaborative problem solving and continuity and support (Borko, 2004; Vescio, Ross & Adams, 2008). Turkey (2004)

also concedes that school clusters is a tool that schools can use to promote collaboration, reflection, sharing and learning among the teaching fraternity. Sharing and collaboration of information to upgrade and improve each teacher's knowledge and skills are therefore the key factors of a cluster.

Clustering has emerged as one of the most common strategies as a reform for professional development used to reach and develop teachers in many countries. According to Avalos (2011), many countries have developed or are currently developing school-based or cluster-based in-service programmes as an important means of updating teacher skills and providing professional support. It is widely recognised in many international states such as the United States of America and the United Kingdom as an alternative strategy to reach teachers due to the failure of the traditional approach programmes used for decades.

The same context for African states such as Zimbabwe, Namibia, Republic of Guinea and South Africa led to clusters being introduced so that all elementary teachers could benefit from ongoing in-service professional development programmes (Mphahlele, 2012). The cluster system has been seen as an alternative professional development which, according to Mphahlele (2012), could serve as an innovative network to support, promote and inspire teacher development leading to quality education.

The purpose of the school cluster system is thus for teacher development because clusters support teacher capacity to teach effectively according to the new active-learning based curriculum and could serve as an innovative network to support, promote and inspire teacher development leading to quality education (Mphahlele & Rampa, 2014). Maphosa et al. (2013) further argue that the clusters ensure the provision of necessary platform for teacher professional development through collaboration and sharing is, therefore, an important function of clusters for practising teachers.

Clusters in an African context

Clustering in African states such as Zimbabwe, Namibia, Republic of Guinea, Ethiopia and many more has emerged as one important form of reaching teachers on professional development. In agreement, MacNeil (2004) endorses that school-and cluster-based TPD programmes have proliferated in recent years in Asia, Africa and Latin America. Commonly, according to various scholars for all these states, the purpose of establishing this type of teacher led professional development is for an alternative strategy to reach teachers due to the failure of the traditional approach programmes used for decades (Maphosa et al., 2013; Mphahlele, 2012; Jita & Ndlalane, 2009b; MacNeil 2004).

Various findings in these African states have emerged in studies conducted in clusters. For example, a study conducted by Mendelsohn and Ward (2001) in Namibia, showed that, clustering improved the quality of teaching and learning, efficiency in terms of staff training and development, co-planning and access to schooling. In Zimbabwe, the same notion of improvement was shown by Chikoko (2007), who found that adequate representation of all the stakeholders concerned in the cluster committees brought about the smooth running of schools, thus ideal as an instrument for capacity development. However, Maphosa et al. (2013) in a study conducted in Zimbabwe recently, still conclude the same notion as Chikoko, but bring to view that whilst teachers were afforded the opportunity to engage with the curriculum the issues tackled in clusters failed to result in major improvements to the curriculum.

In South African schools, cluster systems are in operation, but solely used in moderation of teachers and learners' portfolios; teachers received little or no professional support and lack of partnering of teachers within a geographic location of the school (Mphahlele, 2012). Findings that emerged from studies done in these South African clusters, for example by Mphahlele, (2012); Mphahlele and Rampa (2014) and Jita and Ndlalane (2009b) show a consensus that a cluster system may serve as innovative programmes that can bring quality education but has not been used as expected.

Pitsoe and Maila (2012) argue that, for the purposes of effective training and implementing outcomes-based curriculum policy, a future teacher professional development policy and, more specifically, in educational management and leadership, policy implementation, curriculum issues, interrelationships with the organisation and quality assurance, aimed at the South African education system, should be: influenced and guided by contingency theories. Kriek and Grayson's (2009) HPD Model should underpin these theories and they should be contextualised and adopt a bottom-up approach. They should consider teachers' beliefs and experiences as the starting point of professional development, integrated with district goals and guided by a coherent long-term plan, driven by disaggregated data on student outcomes; they should be designed in accordance with teacher-identified needs and should primarily be school-based.

Research has shown that, although the teacher network approach has gained popularity in countries such as the United States of America (USA), United Kingdom (UK) and many African states such as South Africa, research on its usefulness in changing teachers' knowledge and practices is not conclusive Jita and Ndlalane, (2009a). Similarly, Lieberman and Grolnick (1996) argue that, little is known about how such networks are formed, what they focus on and how they develop teachers. Literature has also shown that less research on clusters has been done in Africa and other developing countries which also applies to South Africa (Jita & Ndlalane, 2009).

RESEARCH METHODOLOGY

This article is a part of a larger study that explored teachers' perspectives on teacher-led professional development programmes. However, in this specific article, our purpose was to explore in detail the reflections of teachers on clusters as one of the teacher led professional development with the potential to improve their teaching and learning. In other words, to find out what teachers think of clusters as professional development that is offered to them. The study was therefore, designed as a qualitative case study. Qualitative case study was more suited for this study as it produces descriptive data – generally the participant's own written or spoken words pertaining to their experience or perception and usually no numbers or counts are assigned to these observations (Brynard, 2014 & Lichtman, 2013).

A total number of six participants who participated in teacher clusters were visited several times to collect the necessary data through semi-structured interviews. We purposefully selected a sample of two principals, one deputy principal and three teachers as respondents who are involved in the cluster professional development programmes as their views and experiences needed to be identified in the study.

Permission was sought from all the relevant stakeholders. All the participants also signed the informed consent to demonstrate their willingness to participate in the study. This specific

paper focuses on the narration of the reflections of teachers on clusters as teacher led professional development from the eyes of three teachers, Mrs Tuma, Mr Somiso and Mrs Katongo, for the enrichment of the concept.

RESEARCH FINDINGS

In this section, we present the interview conversation we had with the interviewed teachers, Mrs Tuma, Mr Somiso and Mrs Katongo. (Synonyms have been used). We further highlight the themes that emerge from the data gathered from these participants.

Mrs Tuma is a veteran teacher who started teaching back in 1986 and holds an Honours degree in education from the University of Pretoria. She is employed as a school principal of a senior primary school in the Mthatha district. She teaches Mathematics and Natural Sciences in grade 4, 5, 6 and 7 due to rationalisation of schools in the circuit.

Mr Somiso, also a veteran, has been in the teaching career for 20 years. He started teaching in 1995, teaching Mathematics, but later added Life Skills, which came with the OBE curriculum. He is the principal of the school currently teaching Mathematics and Life Skills in grade 4, 5, 6 and 7.

Mrs Katongo is a novice post level one professional teacher who is a temporary citizen of South Africa from Ghana. She alleged that she started teaching in 2008 in her country and came to teach in South Africa in 2012. She is currently teaching Mathematics in grade 4,5 and 6 for three years; hence, we refer her as a novice teacher because she recently joined the teaching profession in South Africa.

Teachers' participation in clusters

Mrs Tuma acknowledges that she has been in the district cluster programmes and is currently involved in the circuit cluster programme. For both clusters, she has had the privilege of experiencing the participation first hand either as a coordinator or as a representative of other teachers in a programme. She shared this for her participation:

I have been involved in district cluster for NS, being a coordinator, been selected by the other NS teachers. I have also been selected by the district to attend CAPS training in Stutterheim for NS. I am also involved in a cluster at the circuit for NS grade 7. I look at the analysis of results after June and we decide where the difficulty was and try to improve that area. The other principals in a principal's meeting have selected me.

The above discussion shows that the selection to participate in the programmes is upon a democratic election by the other members; for example, by teachers and by principals. The statement shows that a criterion used by the department is electing the representatives that have already been elected by teachers. In the discussion, Mrs Tuma further detailed that she had a role of having to come back to the teachers and circulate the information after attending a programme.

I've run district clusters on content coverage for NS under all four themes. For the CAPS training as well, I had to then come back and train other teachers in the district. For NS I have run many workshops for all the 15 clusters after each programme I attend on the themes.

From the discussion, it is clear that the cluster leaders played a role in having to come back and divulge their knowledge gain to their circuit clusters.

Who organises clusters and how are they operated?

Following the issue of clusters further, it became important to explore how the programmes are organised and operated. In the conversation, Mrs Tuma shared that:

We decided at district level to form circuit clusters and have cluster leaders. We are busy trying to engage with circuit clusters for the way forward to tackle problematic areas in our subjects. We organise a gathering for teachers for the various circuits at different times and share the content knowledge or teaching style we have received.

Going further with the discussion, Mrs Tuma discussed how the cluster activities are run by alleging that:

In the programmes, it depends, sometimes and most of the time, we work as groups, where we are given something to write and present, a task, you know. Someone who is good in the area to show us how to teach it would lead the workshop, for example, we also make a lot of misconception on terms, so we correct those misconceptions.

The above conversation showed that the cluster programmes are run by experts who cover the content gap as well as improve the pedagogical styles of teachers to improve teaching and learning in schools. The information is then disseminated to all the teachers through cluster activities. Clearly, the cluster activities at district and circuit level play an important role in the teachers' development.

Activities in cluster programmes

Having heard from Mrs Tuma how the cluster activities are run as well as the fact that they learnt in groups and collaborated with each other, I pursued the issue of clusters further by exploring more about what is discussed in the clusters and how much time is spent in the gatherings. Mrs Tuma shared that the programmes usually take a day at circuit clusters, although it may be more for the district gatherings.

For the circuit clusters, it is most of the time a day. It was only in the CAPS workshop that took a week, simply because it was a change of syllabus. Otherwise, normally our workshops for content gap run for a day only.

As Mrs Tuma continued with the conversation, she granted a greater depth of how the cluster activities functioned by further sharing that the content covered in the cluster activities is based on the themes prescribed for that subject:

In the programmes, a lot is covered. We come together and discuss a theme as NS has four themes. We take one theme, although the time becomes against us sometimes, but we make sure we cover the whole information needed. Per se, it is the curriculums, the teaching styles, remember some of us we teach in rural areas with no resources, so we are showed how to improvise so that a lesson is simple. Sometimes we plan together one thing as we write common papers in June and December, set by the department, so we need our kids to be on the same level, though we are still struggling.

From the experience Mrs Tuma has with cluster activities, it also came into view that although the programmes focus on developing the teachers on knowledge of content as well as improve their teaching styles, the collaboration and help gained by the teachers also develop the teacher's personality. She evidenced this by saying that:

These gatherings grow us. You grow as a person; you gain more confidence with your teaching, especially with us in our disadvantaged schools. A teacher, no matter how experienced you are, you need such confidence to improve your student's work and to stay motivated because iteaching sisi (sister) iyagugisa (makes one old).

Evidently, the ultimate aim of the clusters is to bring teachers together to learn from one another. Most importantly, clusters prioritise gain in subject matter and how it can be effectively taught to improve teaching and learning.

Clusters and instruction

Comprehending the transformational change clusters bring to the teachers, I was then interested in finding out the significance clusters have at classroom level and its relevance to teaching and learner performance. Mrs Tuma evidenced that:

Clusters are very important because it is where one voices their difficulties and get advices and go back to classes being refreshed and revived. We are facing the problem of shortage of teachers, especially in Maths and Science, having clusters help the disadvantaged schools because the teachers who teach those subjects get some advices on how to teach certain topics.

Evidently, Mrs Tuma has a very strong belief on cluster programmes as a tool that can create change and bring an effective atmosphere of teaching and learning, leading to an improved student performance. She strongly sees it fit that cluster programmes create a wealth of knowledge and advancement in teaching and growth in schools.

Teacher's views towards clusters

The important aim of this paper is to understand the teachers' own views of clusters as a teacher led professional development programme. In this part, all three participants' interview conversations will be presented. I therefore asked the participants to share their opinions on clusters in pursuit of achieving the aim. All three participants trusted clusters immensely. The highlights below justify this:

My general opinion towards clusters is that... clusters are very important.

The other respondent noted:

The idea of organising clusters is a good idea because in terms of sharing information it is very good. It is good because you can't have all teachers in one hall, having clusters is manageable.

And the last one stated:

I think I consider them to be important.

All three participants obviously view the cluster activities as a critical factor that can build and improve the desired outcomes of better teaching and improved student performance. However, as beneficial as it can be, it is of importance that it becomes regular and continuous. Much more importantly, for teachers to be effective and efficient in their work, the participants slammed hard on the design, organisation, planning and monitoring of the programmes to be prioritised, with resources also being an issue that needs to be highly considered in the planning of cluster activities. This is pronounced by the following quotes from the three interviewed teachers:

We need them as teachers to be done more often and be monitored better than the Department of Education is doing now. They must make it a priority as a professional development of teachers. I would advise that cluster training be done before we go and teach that area and be given ways and methods of teaching certain areas. Be given types of assessment, we can give to learners prior the teaching of this theme.

The other teachers indicated that:

The way they are organised and managed, that's where I see a problem. Also, most importantly, they must be on a continuous basis and not once in a year as they are now. There must be a year plan, which normally does not exist. Everyone just wakes up in bed and call a meeting because he has been called by the department. So, there must be a year plan that states on such and such a day, there's a workshop based on whatever content gap so that day is put aside for that cluster meeting.

While the third argued that:

We would consider highly the topics to be done continuously because when you do ANA exams you find that there are specific topics to answer like division and multiplication which learners find difficult to do. I think it's a general problem for all schools. Such topics need to be discussed continuously so that we look at different ways of teaching them.

Mrs Tuma further shared that:

The only problem we face when running the cluster is while we are at cluster meetings, the kids are left alone and since there are a few teachers in our schools due to rationalisation, the school becomes chaotic and the kids become unruly. I would advise the department to give each school a CD to run on the computer where the training will be viewed at school instead of only just attending it at Trinset.

In relation to the issues of concern the participants have mentioned above, they further voiced cries of dissatisfaction towards the time taken in the programmes. The quotes below echo such cries:

I think the time constraints are due to the non-monitoring. You know teachers, if there is no monitoring, they always feel like it's a holiday, it's a half day, so they will push so that you finish early but if it's monitored then it will be fine. And what I have observed in the past is that if the workshop was for four hours, it is easy to organise a one-hour workshop and then you are gone. As you come from a highly organised environment where all the information is given, but when you go to clusters it becomes weaker and weaker. By the time it gets to the learners then it becomes a zero. It is also important that in terms of time, one-day workshops are not giving enough information, if we get more lengthy workshops or even using weekends and see how teachers are then compensated for that, we would then be getting more information and not at the expense of the learners.

Or

Oh, if I were to plan or run a cluster programme, I would definitely start with time. I would take out the one-day workshop. For me, for example the workshop I attended took one day and it really was not enough. Some things that I needed attention on were not done.

Mrs Katongo, the novice teacher, further shared one important factor of refreshments that also needs to be put forward and furthermore bringing to view a new aspect of subsidising the transportation of teachers. The woman shares the same sentiment as some other participants, which shows that refreshments play a role in the running of a workshop and the cases feel it would be a catalyst in motivating teachers to attend the programmes:

One other thing is refreshments for teachers to motivate them to attend and enjoy the workshop because sometimes there's not even water in these workshops. Subsidise their transport because sometimes a workshop is called at a time where teachers do not have money, even if that is done by schools and be made compulsory. Because of that teachers do not feel motivated to attend the workshops. So that when they are there they will eat there so that their mind is focused on the workshop and we are able to discuss anything.

The quotations above are one way of showing the importance and need of cluster programmes as teacher led professional development that should be run continuously to be effective. For progression and smooth running of the programmes, issues such as planning and monitoring, resources and refreshments also need to be highly considered as they also influence the way teachers feel and affect the effectiveness of the cluster programme.

DISCUSSION

The common purpose of clusters or teacher communities is to operate on the premise that learning is a social process and it requires people to collaborate and share information and ideas (Maphosa, Mutekwe, Machingambi, and Wadesango, 2013). Therefore, the idea is for teachers to come together for sustained periods of time to engage in collaborative inquiry around problems of practice and to jointly plan and reflect on, teaching all in the service of improving student learning (Nelson, 2009). The teachers interviewed in this study voiced the use of clusters as a form the department uses to reach out to the teachers in smaller scales for an improved teacher empowerment as reflected by one of the teachers. As evidenced by the teachers, designed in the form of cluster meetings, the clusters use a group work approach when the cluster activity is in progress; thus, involving teachers. Teachers are passionate and enthusiastic about this. According to Nelson (2009), the idea in cluster networks is for teachers to come together for sustained periods of time to engage in collaborative inquiry around problems of practice and to jointly plan and reflect on teaching all in the service of improving student learning. Schlager et al. (2009) further view teacher networks, in different forms, as effective alternatives and supplemental interventions to traditional workshops and institutes for learning content and pedagogy. Such involvement and jointly working together is evidenced in the quotes as one thing teachers enjoy about clusters. The teachers' views towards clustering has been commonly equivalent as they all echoed that cluster

programmes are very important and effective and much more related to their classroom policies and practice as they are given opportunities to be actively involved.

The teachers' voices therefore also echoed what van Es (2012) claims detailing that there is collegiality and collaboration where group members take responsibility for each other's growth and coordinate individual knowledge and expertise to advance the collective work of the group. Starkey et al. (2009) and Rogers et al. (2007) note that professional development programmes are necessary not only for new teachers, but also for veteran teachers with an emphasis on the importance of professional development programmes to veteran teachers being for self-renewal. Komba and Nkumbi (2008) add that professional development provides teachers with opportunities to explore new roles, develop new instructional techniques, refine their practice and broaden themselves, both as educators and as individuals. Therefore, as the teachers indicated, develops them into confident and experienced teachers who can assertively produce effectively performing learner achievement. For Zakaria and Daud (2009), good teachers constitute the foundation of good schools and improving teachers' skills and knowledge is one of the most important investments of time and money that local, state and national leaders can make in education.

The amount of time spent in the professional development activities must receive consideration because professional development, by its nature, should happen while the teachers are engaged in their work and profession (Mokhele, 2011). The longer activities, as noted by Desimone (2009), are more likely to encourage in-depth discussions of content, student conceptions and misconceptions. Also drawing from Garet et al. (2001), Mokhele (2011) emphasises the emerging consensus in literature regarding teacher learning and professional development calls for professional development to be sustained over time. The teachers interviewed voiced dissatisfaction with this time allocation as they point out that it creates challenges of not being able to cover other aspects whether of subject matter, content or pedagogical strategies. According to them, the time allocated to these cluster programmes is a constraint that forms many other factors that create ineffective professional development programmes. As their quotes suggest, information received from an environment that had enough time allocated ends up being lost as it reaches the circuit cluster level.

From the quotes, it is clear that the teachers are grounded by a belief that for them to be effective in their classrooms, they need to be continuously redefined and as such that keeps them motivated. The cluster programmes, as the above quotes relate, have opened doors of growth in skills and knowledge beyond one's ability and therefore asserting for broader goals that aim at improving the future of the learners. Meidl and Meidl (2011) emphasise that even if teachers are mandated to implement scripted curricula, teacher-led professional development can enable curriculum adaptation or integration. The teachers view the cluster programmes as tools that can be a vehicle that makes learning easier for the learners through them as teachers being continuously developed holistically.

The pride of knowing who you are as a teacher is definitely an important factor that can contribute towards effective teaching and learning as the quotes suggest. Furthermore, the high stakes and testing demands the classroom level brings needs a teacher who carries all the necessities of being a professional teacher. Such necessities as the teachers shared, are not acquired by one immediately after college, but are gradually acquired through attending developmental workshops; hence, it is a need that the clusters be structured to provide that. According to Stacy

(2013), teacher-led professional development can help overcome standardisation by providing opportunities to enhance professional autonomy.

Dyer (2013) claims a very important point of supportive accountability within a professional development programme. The scholar states that change in teaching practice is challenging and requires support and accountability. Therefore, because cluster programmes provide teachers the opportunity to develop personal action plans, report back to the group what happened in implementing those plans, reflect and receive feedback (support) from colleagues who are working on the same changes in practice, it becomes imperative that they are monitored correctly (Dyer, 2013). Borko (2004) and Ross and Adams (2008) have also shared the same notion of continuity and support as an essential feature of effective professional development. Such poor monitoring, as claimed by the teachers, is a reason and cause that makes the programmes non-continuous. One respondent voiced the challenge of time as maybe even being driven by the poor monitoring. According to the respondents, teachers are similar to schoolchildren and constantly need to be kept motivated and on their toes by seeing a departmental official to whom they must report and who is also involved in monitoring them.

In Zimbabwe, as alleged by the teachers, Chikoko (2007) found that adequate representation of all the stakeholders concerned in the cluster committees brought about smooth running of schools; thus, it is quite ideal as an instrument for capacity development. This justifies the fact that cluster systems need to be clearly presented and explained to build awareness and a clear understanding of their requirements, representations, processes and potentials (Dittmar, Mendelsohn & Ward, 2002). As suggested by the respondents, a planned schedule of organising, administering and running of the programmes should be in place. The teachers put themselves as having a responsibility of playing a role in making sure that the cluster system runs effectively not only for the teaching and learning process but also for the teachers themselves (Ifanti & Fotopoulou, 2011). Such plans as the teachers imply, would minimise the issues of a lack of monitoring that engulf these cluster programmes and thus ensure a smooth running.

The participants suggested the importance of being provided with resources when attending these cluster meetings such as resources that help when in class as well as minimising being away from class for a long time. One other prominent feature the data in this study has revealed is the provision of refreshments and transport services. This important distinction lies in acknowledging that a professional development programme should meet all the required elements that help hold total focus from the teachers. As teachers have different needs as well as work in different settings it is therefore important that a programme be modified to suit the needs of the teachers it is developing. The participants have stated that both these features should be acknowledged as important and taken into serious consideration as they assert that it plays a big role in producing an effective cluster programme. As the participants claim, availability of refreshments and subsidy of transport are the key factors that determine time of departure and attendance statistics of a cluster programme. Guskey (2002) argues that important questions for professional development workshops and seminars also include, was the coffee hot and ready on time? Was the room at the right temperature? Were the chairs comfortable? However, to some, questions such as these may seem silly and inconsequential but experienced professional developers know the importance of attending to these basic human needs (Guskey, 2002). Archibald, Coggshall, Croft and Goe (2011) have also asserted that in order to ensure the effective implementation of high-quality professional development, states and districts must have a plan for financing the costs of professional learning

activities. The European Commission (2011) also agree that in seeking to meet teachers' professional development requirements, policymakers and practitioners need to consider how to support and encourage participation and how to ensure that opportunities match teachers' perceived needs. There must be a balance with the cost in terms of finance and teachers' time as the current economic climate has reduced the discretionary resources that states, districts and schools have at their disposal. The scholars further write that, states, districts and schools often cut professional development and the positions that support it in times of shrinking budgets because of the perception that doing so does not compromise the basic operation of the school's teaching and learning. However, if the teaching in some classrooms is not at a level that allows students to achieve at least one year of growth, this perception is false, and resources need to be reallocated accordingly so that they are directly linked to improving teaching and learning. As the scholars suggest, it is of importance, as the teachers allege, that provisions of financial support be provided for these cluster programmes.

CONCLUSION

The findings of the study and revelations made by literature illustrate a cluster system as a tool that can bring an effective professional development programme if implemented according to the needs of the teachers and schools at large. The teachers emphasised the need for clusters in their schools, their classrooms and for themselves as they shared how it uplifts and closes gaps in their teaching environment. The findings corroborate what Hismanoglu (2010) reveals when also identifying that a professional development programme should recognise and address the many impediments to teachers' growth at the individual, school and district level.

As such professional development (PD) programmes should emphasise the integrated development of learning area/subject content knowledge and pedagogical skills; teachers' competence in the language of teaching and learning; the continuing professional development for teachers in South Africa; changing social character of schools and skills required for the teaching of diverse classrooms (National Policy Framework for Teacher Education, 2007). The paper concludes, therefore, that non-involvement of teachers in the planning of their professional development results in the ineffectiveness of such programmes. It is therefore significant to consider that transformation can only occur if the teachers' voices are heard, acknowledged and incorporated into the planning and running of the cluster programmes.

REFERENCES

- Adams, J. (2000). *Taking Charge of the Curriculum*. New York: Teachers College Press.
- Archibald, S., Cogshall, J.G., Croft, A., & Goe, L. (2011). High-quality professional development for all teachers: Effectively allocating resources. *Research & Policy Brief*. Washington, DC: National Comprehensive Center for Teacher Quality.
- Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education*, 27(1), 10-20.
- Barth, R. S. (1984). "The Principal Ship: The Professional Development of Principals" *Educational Leadership* 42 (2), 92 - 94.

- Bayar, A. (2014). The components of effective professional development activities in terms of teachers' perspective. *International Online Journal of Educational Sciences*, 6(2), 319–327. doi:10.15345/iojes.2014.02.006
- Borko, L. (2004). *Professional Development and teacher learning: Mapping the terrain*. Educational Researcher 33 (8) < http://www.aera.net/uploadedFiles/Journals_and_Publications/Journals/Education_Researcher/Volume_33_No_8/02_ERv33n8_Borko.pdf >
- Brynard, D. J., Hanekom, S. X. & Brynard, P. A. (2014). Introduction to research. 3rd Ed. Pretoria. Van Schaik.
- Chikoko, V. (2007). The school cluster system as an innovation: Perceptions of Zimbabwean teachers and school heads. *Africa education review*. (Vol.4). No.1
- Cochran-Smith, M., & Lytle, S.L. (1992a). Communities for teacher research: Fringe or forefront? *American Journal of Education*, 62(4), 298-324.
- Darling-Hammond, L. (1999). *Reshaping teaching policy, preparation, and practice*. Washington, DC: AACTE.
- Department of Education. (2007). The national policy framework for teacher education and development in South Africa: more teachers, better teachers. Pretoria: Government Printer.
- Desimone, L.M. 2009. Improving impact studies of teacher's professional development: toward better conceptualizations and measures. *Educational Researcher* 38(3):181-199.
- Dinsmore, J., & Wenger, K. (2006). Relationships in preservice teacher preparation: From cohorts to communities. *Teacher Education Quarterly*, 33(1), 57-74.
- Dittmar, F., Mendelsohn, J., & Ward, V. (2002). The Cluster system in Namibia. Windhoek: Raison.
- Dufour, R., Eaker, R., Dufour, R. (2005). Closing the knowing gap. On Common Ground: The Power of Professional Learning Communities. IN: The National Education Service.
- Dyer, E. (2013). Paper presented at "Pushing the Envelope: How Can Digital Resources Increase Collaboration and Standards Success for Teachers?" Teaching Channel's Research and Design Conference, North western University. November 6-8, 2013, Evanston, IL.
- Garet, M., Porter, M., Desimone, L., Birman, B., & Yoon, K. (2001). *What makes professional development effective?* American Educational Research Journal, 38(4) , 915-946.
- Giordano, E. A. (2008). School clusters and teacher resource centres. Paris: Unesco, IIEP.
- Guskey, T. (2002). Does it make a difference? Evaluating professional development. *Redesigning Professional Development*, 59(6), 45–51.
- Hismanoglu, M. (2010). Effective professional development strategies of English language teachers, 2, 990–995. doi: 10.1016/j.sbspro.2010.03.139
- Ifanti, A., & Fotopoulou, V. (2011). Teachers' perceptions of professionalism and professional development: A case study in Greece. *World Journal of Education*, 1, 40-51.
- Jita, L. C., & Ndjalane, T. C. (2009a). Teacher clusters in South Africa: opportunities and constraints for teacher development and change 1, 27(March), 58–68.
- Jita, L. C., & Ndjalane, T. C. (2009b). Teacher clusters in South Africa: opportunities and constraints for teacher development and change 1, 27(March), 58–68.
- Koepfen, K., Huey, G., & Connor, K. (2000). An effective model in a restructured teacher education program. In David M. Byrd & D. John McIntyre (Eds.), *Research on professional development schools*. Thousand Oaks, CA: Corwin Press.
- Komba, W. L. & Nkumbi, E. (2008). Teacher Professional Development in Tanzania: perceptions and practices. *Journal of International Cooperation in Education*, 11(3), 67 - 83.
- Kosnik, C., & Beck, C. (2003). The contribution of faculty to community building in a teacher education program: A student teacher perspective. *Teacher Education Quarterly*, 30(3), 99-114.

- Kriek, J. & Grayson, D. (2009), 'A Holistic Professional Development model for South African physical science teachers', *South African Journal of Education*, vol. 29, no. 2, pp. 185-203. [http://www.journals.co.za/ej/ejour_educat.html]
- Levine, M. (2010). *Developing principles for clinically based teacher education*. Washington, DC: National Council for Accreditation of Teacher Education. Retrieved from <http://www.ncate.org/LinkClick.aspx?fileticket=qhv0TxP2Gm0%3D&tabid=715>
- Lichtman, M. (2013). *Qualitative Research in Education: A User's Guide*. USA: SAGE
- Lieberman A & Grolnick M 1996. Networks and reform in American education. *Teachers College Record*, 98, 7-45.
- Lieberman, A. & McLaughlin, M.W. (1992). Networks for educational change: Powerful and problematic. *Phi Delta Kappan*, 73(9), 673-677.
- Maphosa, C., Mutekwe, E., Machingambi, S., & Wadesango, N. (2013). School Clusters in Zimbabwe: What Issues Do Clusters Tackle? 5(3), 293-300.
- McLaughlin, M.W. & Talbert, J.E. (1993). *Contexts that matter for teaching and learning: Strategic opportunities for meeting the nation's education goals*. Palo Alto, CA: Centre for Research on the Context of Secondary Schools.
- McLaughlin, M.W. & Talbert, J.E. (2001). *Professional communities and the work of high school teaching*. Chicago: University of Chicago Press.
- McLaughlin, M.W. & Talbert, J.E. (2006). *Building school-based teacher learning communities: Professional strategies to improve student achievement*. New York: Teachers College Press.
- Mcneil, DJ. (2004). School and cluster based teacher professional development: Bringing teacher learning to the schools. EQUIP 1. Working paper No. 1. Washington, DC: USAID.
- Mendelsohn, J., & Ward, V. (2001). A Review of Clusters of Schools in Namibia. Windhoek: RAISON.
- Meidl, T. & Meidl, C. (2011). Curriculum integration and adaptation: Individualizing pedagogy for linguistically and culturally diverse students. *Current Issues in Education*, 14(1).
- Mokhele, M. L. (2011). Teachers' Perspectives on Continuing Professional Development: A Case Study of the Mpumalanga Secondary Science Initiative (MSSI) Project. PhD Thesis, Unpublished. University of South Africa, Pretoria.
- Mphahlele, L. K. (2012). School cluster system: A qualitative study on innovative networks for teacher development. *Procedia - Social and Behavioral Sciences*, 47(2002), 340-343. doi: 10.1016/j.sbspro.2012.06.660
- Mphahlele, L., & Rampa, S. (2014). Cluster system: An innovative network for teacher development. *Procedia - Social and Behavioral Sciences*, 116, 3131-3134. doi: 10.1016/j.sbspro.2014.01.721
- Pitsoe, V. J., & Maila, W. M. (2012). Towards constructivist teacher professional development. *Journal of Social Sciences*, (8)3: 318-324.
- Rogers, M.P., Abell, S., & Lannin, J. (2007). Effective Professional Development in Science and Mathematics Education: Teachers' And Facilitators' Views. *International Journal Of Science & Mathematics Education*, 5(3): 507-532.
- Schlager, M. S., Farooq, U., Fusco, J., Schank, P., & Dwyer, N. (2009). Analyzing online teacher networks: Cyber networks require cyber research tools. *Journal of Teacher Education*, 60(1), 86-100. doi: 10.1177/0022487108328487.
- Sergiovanni, T. (2000). *The lifeworld of leadership: Creating culture, community, and personal meaning in our schools*. San Francisco: Jossey Bass.
- Stacy, M. (2013) 'Teacher-led professional development: Empowering teachers as self-advocates.', *The Georgia Social Studies Journal*, vol. 3, no. 1, pp. 40-49.
- Starkey, L., Yates, A., Meyer, L. H., Hall, C., Taylor, M. & Stevens, S. (2009). Professional development design: embedding educational reform in New Zealand. *Teaching and Teacher Education*, 25: 181-189.

- Supovitz, J.A. (2002). *Developing communities of instructional practice*. Teachers College Record, 104, 2,127-146.
- Turkey, I. (2004). An online social constructivist tool: A secondary school Experience in the Developing world. *Turkish online Journal of Distance Education*. (Vol.9). No. 3. Article 7.
- Van Es, E. A., & Sherin, M. G. (2008). Mathematics teachers' "learning to notice" in the context of a video club. *Teaching and Teacher Education*, 24(2), 244e276.
- Zakaria, E. and M.Y. Daud, 2009. Assessing mathematics teachers' professional development needs. *Eur. J. Soc. Sci.*, 8: 225-231.

ABOUT THE AUTHORS

LULAMA ZIDE

Faculty of Education
University of Free State
imdodanazide@gmail.com

MATSELISO L MOKHELE

Faculty of Education
University of Free State
mokheleml@ufs.ac.za